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Original Paper

Collaborative Survey of Eggplant Genetic Resources in Lao People's Democratic Republic, 2019

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Summary

Under a Joint Research Agreement (JRA), the National Institute of Agrobiological Sciences (now merged with the National Agriculture and Food Research Organization [NARO]), Japan) and the National Agriculture and Forestry Research Institute (NAFRI), Lao People's Democratic Republic (Lao PDR), have been collaborating since 2014 to survey plant genetic resources in Lao PDR. In 2019, the JRA was extended until 2023 under a newly signed addendum. The main objective of the present survey was to collect the samples of eggplant (*Solanum melongena* L.) and related crop and wild species from the Savannakhet Province of southern Lao PDR. During November 5 to 20, 2019, we collected 163 samples of *S. melongena* (n=140) and additional *Solanum* spp. (n=23). We found various eggplant landraces in southern Lao PDR and observed variations in fruit shape (flattened, globular, ovoid, obovate, or ellipsoid), size (7.9 to 95.1 mm long), and skin color (purple, green, or white). Over half of the collected landrace accessions were spineless. The collected seeds are deposited at NAFRI for further evaluation of their general characteristics and reproduction via self-pollination in the next season. Following seed reproduction, a subset of the collection will be transferred to the Genetic Resources Center, NARO, Japan, under the Standard Material Transfer Agreement in accordance with the International Treaty on Plant Genetic Resources for Food and Agriculture. In Japan, NARO will evaluate the resistance of these accessions to *Verticillium* wilt, *Fusarium* wilt, bacterial wilt, powdery mildew, and nematode infection as well as their morphological characteristics.

KEY WORDS: *Solanum*, eggplant, Lao People's Democratic Republic, NAFRI, HRC, NARO, PGRAsia

Introduction

Since 2006, the National Institute of Agrobiological Sciences (NIAS; now merged with the National Agriculture and Food Research Organization [NARO], Japan) and the National Agriculture and Forestry Research Institute (NAFRI), Lao People's Democratic

Republic (Lao PDR), have conducted collaborative surveys of plant genetic resources in Lao PDR every year under a Memorandum of Agreement and a Memorandum of Understanding (Sakata *et al*. 2008; Saito *et al*. 2009; Matsunaga *et al.* 2010; Okuizumi *et al.* 2011, 2013; Kawase *et al*. 2012).

In 2014, the NIAS and NAFRI signed a Joint Research Agreement (JRA) under the Plant Genetic Resources in Asia (PGRAsia) Project funded by the Ministry of Agriculture, Forestry and Fisheries of Japan to collect plant genetic resources (Okuizumi *et al.* 2016). In 2019, the JRA was extended until 2023 under a newly signed addendum. The present report describes the findings of the sixth survey under the PGRAsia Project to collect vegetable plant genetic resources in Lao PDR.

The five previous surveys explored six northern provinces, namely Houaphan, Xiengkhouang, Oudomxay, Phongsaly, Luang Namtha, and Bou Keo, in 2014, 2015, and 2016 (Saito *et al.* 2015, 2016, 2017); two southern provinces, namely Sekong and Attapeu, in 2017 (Hamato *et al*. 2018); and two central provinces, namely Bolikhamxay and Khammounane, in 2018 (Miyatake *et al.* 2019a). During these respective explorations, 134, 124, 108, 200, and 135 samples of eggplant and its relatives (*Solanum* spp., including wild species) were collected.

Nearly 70% of the land in Lao PDR is mountainous (Photo 1), and many ethnic minorities live in these regions; at least 48 ethnic tribes are present in Lao PDR (Chamberlain 2003). Considering the difficulties in reaching and interacting with these minority populations, many undescribed eggplant landraces are expected to still be present in this region. In the present survey, we collected new plant materials from many villages in a southern province of Lao PDR—Savannakhet—which has over 1,000 villages.

Photo 1. Mountainous region of Lao People's Democratic Republic

Methods

Prior to the survey, a Laotian member of our survey team (S.T.) collected information on eggplant genetic resources in the Savannakhet Province. Based on this information, we surveyed the area from November 5 to 20, 2019 (Table 1, Fig. 1). We rented a car (Photo 2) and visited the backyards of local houses (Photo 3) and agricultural fields (Photo 4) in some villages to obtain samples of fruits and seeds. Survey at each site included confirming the location using a global positioning system receiver (eTrex 30J, Garmin International Inc., Kansas, USA); collecting plant samples; and interviewing locals to obtain information about the collected plant materials, such as local name, usage, and cultivation area (Photo 5).

Table 1. Itinerary of the survey

Date	Day	Itinerary	Stay	Distance covered (km)
5-Nov	Tue	Chubu 11:00 (TG645) -- 15:40 Bangkok 18:35 (TG574) -- 19:45 Vientiane	Vientiane	
6-Nov	Wed	Visit HRC, Discuss importing eggplant seeds & Prepare the survey	Vientiane	
7-Nov	Thu	Vientiane -- Savannakhet	Savannakhet	(468)
8-Nov	Fri	PAFO, Champhon district, Savannakhet province	Xonbouli	129
9-Nov	Sat	Xonbouli district, Savannakhet province	Songkhon	122
10-Nov	Sun	Songkhon and Xaiphouthong district, Savannakhet province	Outhoumphon	103
11-Nov	Mon	Outhoumphon and Atsaphangthong district, Savannakhet province	Phalanxai	162
12-Nov	Tue	Phalanxai district, Savannakhet province	Phin	113
13-Nov	Wed	Phin district, Savannakhet province	Vilabouli	109
14-Nov	Thu	Vilabouli district, Savannakhet province	Xepon	105
15-Nov	Fri	Xepon district, Savannakhet province	Xepon	123
16-Nov	Sat	Return from Savannakhet province to Khammouane province	Thakhek	(379)
17-Nov	Sun	Return from Khammouane province to Vientiane	Vientiane	(344)
18-Nov	Mon	Visit HRC & Discuss	Vientiane	
19-Nov	Tue	Vientiane 20:30 (TG575) -- 21:35 Bangkok	on flight	
20-Nov	Wed	Bangkok 00:05 (TG644) -- 7:30 Chubu		Total 966

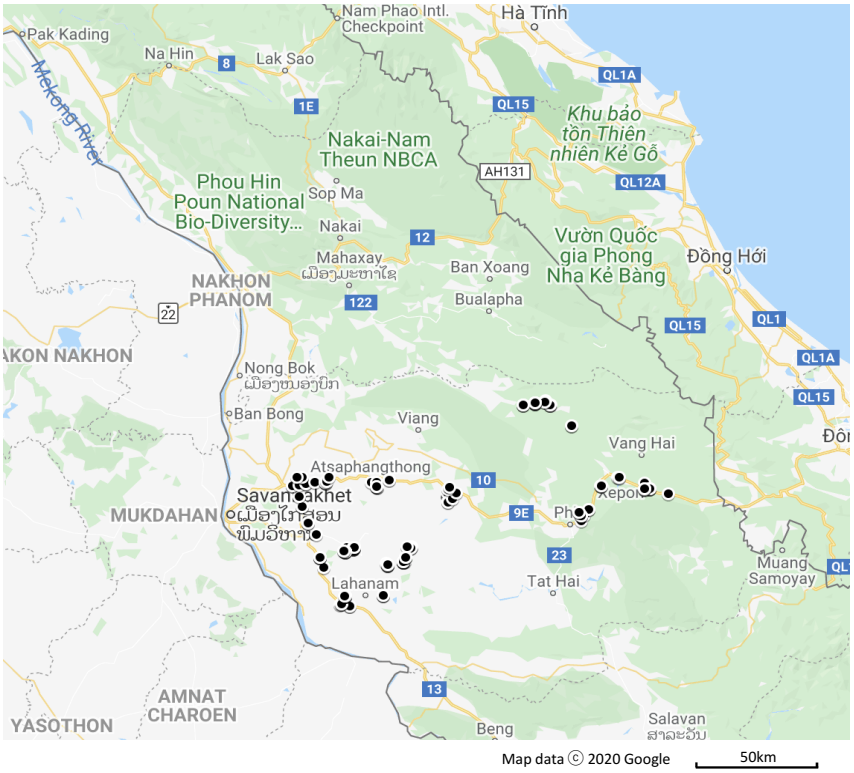

Fig. 1. Main sites (●) visited during the 2019 survey in southern Lao People's Democratic Republic. Plotted on a map provided by Google Inc.

The principal goal was to collect only eggplant landraces and their relatives. On November 6, 2019, the Japanese members of the survey team (M.K., U.H., and Y.M.) visited the Horticultural Research Center (HRC) to discuss the survey plan with the Laotian members (S.P., S.M., and S.T.) (Photo 6). After the survey, on November 19, 2019, we returned to the HRC and reported our preliminary results to the Director of HRC.

Results

We covered 966 km in the Savannakhet Province (Table 1) and collected 163 samples from 46 villages in 10 districts (Table 2). The collected samples included *S. melongena* L. (n=140), *S. violaceum* L. (n=12), *S. torvum* Sw. (n=7), *S. aethiopicum* L. (n=2), *S. mammosum* L. (n=1), and *Solanum* sp. (n=1) (Tables 2-4). The seeds that were collected or extracted from

Photo 3. Backyard of a local house in the Nonsavang village

Photo 2. The car rented during the main part of the survey

Photo 4. An eggplant farm field in the Natalang village

Photo 5. Interviews with local people in the Nongveng village

Photo 6. Discussion with the unit leader of the Horticultural Research Center in Vientiane

the collected fruits are deposited at the NAFRI. After seed reproduction, a subset of the collection will be transferred to the Genetic Resources Center, NARO (NGRC), Japan, as a reserve under the Standard Material Transfer Agreement of the International Treaty on Plant Genetic Resources for Food and Agriculture.

The remainder of this section describes the everyday details of the survey. The collected samples were mature fruits, unless stated otherwise.

November 7, 2019: We traveled for 8 hours from Vientiane, the capital of Lao PDR, to Kaysone Phomvihane, the central district of the Savannakhet Province, via Route 13S. Although we visited several small markets along the way, we could not find mature eggplant fruits for collecting seeds.

November 8, 2019: We visited the Provincial Agriculture and Forestry Office (PAFO) of Savannakhet (Photo 7) to explain our plans and objectives to a representative. They informed us that eggplant is one of the most popular vegetables in Savannakhet; therefore, seed samples could be collected from everywhere. However, in the previous year, this area was damaged by flooding, and poor road conditions might have disrupted our survey in the mountainous areas. After 2 hours of driving from the PAFO following the guidance of the PAFO staff member, we visited the District Agriculture and Forestry Office (DAFO) of Champhon (Photo 8). After a meeting, a staff member of the Champhon DAFO joined us on this day to survey the district. On the way to the day's first village, at the storefront of a market, we collected the first sample (#1), which was a rouwhitish-green eggplant fruit (Photo 9). We then visited Nonvilayvhan, the day's first village, and collected 16 samples (#2-17), including *S. torvum* (#3; Photo 10). From the next

Photo 7. Discussion with the Director of the Provincial Agriculture and Forestry Office (PAFO) of the Savannakhet province

Table 2. Collected accessions

Province	District	Number of villages	*Solanum melongena*	*Solanum violaceum*	*Solanum torvum*	*Solanum aethiopicum*	*Solanum mammosum*	*Solanum* sp.	Total
Savannakhet	Champhon	3	21	2	1	0	0	0	24
Savannakhet	Xonbouli	5	22	2	3	0	0	0	27
Savannakhet	Songkhon	4	12	2	1	0	0	1	16
Savannakhet	Xaiphouthong	3	4	1	0	0	0	0	5
Savannakhet	Outhoumphon	8	16	2	1	0	1	0	20
Savannakhet	Atsaphangthong	2	7	0	0	0	0	0	7
Savannakhet	Phalanxai	6	16	1	0	1	0	0	18
Savannakhet	Phin	5	9	0	0	0	0	0	9
Savannakhet	Xepon	5	16	1	0	1	0	0	18
Savannakhet	Vilabouli	5	17	1	1	0	0	0	19
Total		46	140	12	7	2	1	1	163

village Dongkhammeune, we collected six samples, including *S. violaceum* (#21 and #22; Photo 11). In total, 24 samples were collected on the first day of the survey. After surveying the two villages, we moved to a guesthouse and extracted seeds from the collected fruits (Photo 12).

November 9, 2019: In the morning, we visited the house of a staff member of the Xonbouli DAFO, who joined us for survey on this day. From the backyard of their house, we collected a sample of *S. torvum* (#25), and the fruits were prepared for breakfast. Locally, the fruits of *S. torvum* are served raw or boiled (Photo 13). From the day's first village Nonsavang near the Xonbouli DAFO staff member's house, we collected seven eggplant samples (#26-32). The last sample (#32; Photo 14) was a seed sample provided by a local farmer. Next, we moved to the Donghongkham village and collected nine samples (#33-41). Then, we moved to the Kabao village and collected four samples (#42-45). From both villages,

Photo 8. Discussion with the Director of the District Agriculture and Forestry Office (DAFO) of the Champhon district

Photo 11. Fruits and other plant organs of *Solanum violaceum* collected from the Dongkhammeune village (#21)

Photo 9. Fruits and other eggplant organs collected from the Kangkoktong village (#1)

Photo 12. Extraction of seeds from rotten fruits at the guesthouse

Photo 10. Fruits and other plant organs of *Solanum torvum* collected from the Nonvilayvhan village (#3)

Photo 13. Raw and boiled fruits of *Solanum torvum* at the Nonsavang village

samples of *S. torvum* (#33 and #43) and *S. violaceum* (#38 and #44) were collected. Around these villages, rice farming is very popular, and distilled liquor is made from rice (Photo 15). At the end of the day, we visited the Vangkhonkham village and collected five samples (#46-50). The fruit skin of sample #46 was purple (Photo 16), which is unusual in the southern region of Lao PDR. On the way to a guesthouse, we collected the day's last sample (#51). After dropping off the Xonbouli DAFO staff member, we moved to the guesthouse and extracted the seeds.

November 10, 2019: In the morning, we visited the Songkhon DAFO, and a staff member of the DAFO joined us for survey on this day. On the way to the day's first village, we collected samples of *S. torvum* (#52) and *S. melongena* (#53). Sample #53 had remarkable hard spines on the calyx, stem, and leaf. From the Nonsomboun village, we collected one sample of *S. violaceum* (#54) and three samples of *S. melongena* (#55-57). The fruit of sample #55 was very slender (Photo 17), while no other eggplant fruits collected in our survey were as thin. Next, we moved to the Nonghai village and collected five samples of *S. melongena* (#58-60, #62, and #63), one sample of *Solanum* sp. (#61), and one sample of *S. violaceum* (#64). The species could not be identified for sample #61, which had small red fruits (Photo 18). Then, we moved to the next village Nakala. Near an agricultural farm of watermelon and sweet potato, some landraces of eggplant were cultivated around a lake. Remarkably, the color of the fruit skin of sample #66 was white with purple variegation (Photo 19). After parting with the Songkhon DAFO staff member, we collected a sample of *S. melongena* (#68) on

Photo 16. Fruits and other plant organs of eggplant (#46) collected from the Vangkhonkham village

Photo 14. Fruits and other plant organs of eggplant (#32) collected from the Nonsavang village

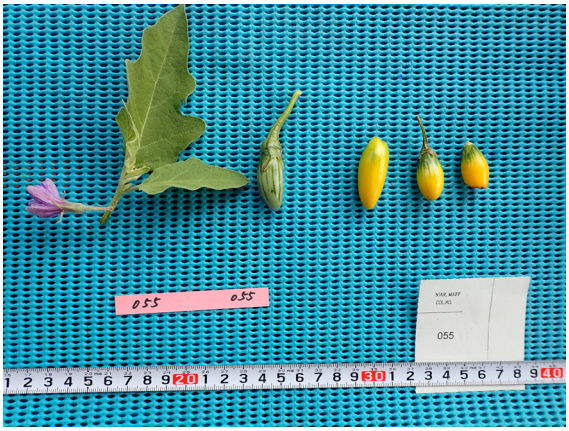

Photo 17. Fruits and other plant organs of eggplant (#55) collected from the Nonsomboun village


Photo 15. Traditional method of making distilled liquor from rice in the Donghongkham village

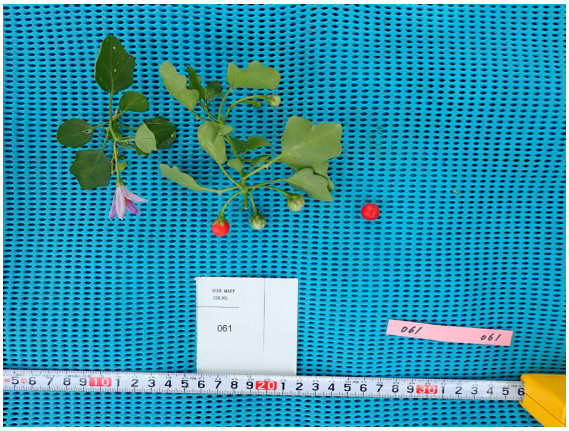

Photo 18. Fruits and other plant organs of *Solanum* sp. (#61) collected from the Nonghai village

the way to the next district. Next, we stopped at a market and bought three samples of *S. melongena* (#69, #70, and #72) and one sample of *S. violaceum* (#71). Next, we continued the survey on the way to a guesthouse and collected four samples of *S. melongena* (#73, #74, #76, and #77) and one sample of *S. violaceum* (#75). At the guesthouse, we extracted seeds and organized the data of the collected samples.

November 11, 2019: We visited the Outhoumphon DAFO (Photo 20), and a staff member of the DAFO joined us for our survey this day. On the way to the day's first village, we collected a sample of *S. melongena* (#78). From the Xaisaorad village, we collected a sample of *S. mammosum* (#79) with hard spines on the calyx, leaf, and stem. It was the first sample of this species during the survey. Additionally, we collected a sample of *S. melongena* from the same village (#80). Next, we walked around three villages (Vangkam, Nonvilay, and Laojai) and collected one sample of *S. torvum* (#81), nine samples of *S. melongena* (#82–89 and #91), and one sample of *S. violaceum* (#90). Of note, the fruit of sample #84 was very large (85.4 mm long) compared with the fruits of other samples collected in the survey. In the evening, we moved to the Atsaphangthong District and visited the DAFO. We then walked around three villages (Haumeung, Dongkhaung, and Haumeung) and collected eight samples of *S. melongena* (#92–99). In this area, many vegetables are produced in polyhouses, and the cultivation environment is well-managed (Photo 21). Interestingly, in these villages, some eggplants showed wilt symptoms, such as of bacterial wilt (Photo 22). When no mature fruits were found, the farmers kindly provided us stored seeds (#94, #98, and #99). After the survey, we moved to a guesthouse and extracted the seeds.

November 12, 2019: In the morning, we visited the Phalanxai DAFO and picked up a staff member of the DAFO. From the day's first village Namarkme, we collected 10 samples of *S. melongena* (#100–102, 104–110) and one sample of *S. violaceum* (#103). We then moved to the Beungtaley village and collected one sample each of *S. melongena* (#111) and *S. aethiopicum* (#112). This was the first sample of *S. aethiopicum* during the survey. The local people cook the fruits of *S.*

Photo 19. Fruits and other plant organs of eggplant (#66) collected from the Nakala village


Photo 21. An integrated farm of many vegetable crops in the Haumeung village


Photo 20. Discussion with the staff of the District Agriculture and Forestry Office (DAFO) of the Outhoumphon district


Photo 22. Disease symptoms of bacterial wilt observed in the Dongkhaung village

aethiopicum by boiling or baking. Next, we visited four villages (Nongveng, Phonetan, Palannew, and Panomsai) one after another. We collected one sample each of *S. melongena* from these four villages (#113–116). Around this area, an irrigation facility that pumps water from a pond has been developed through the activities of the Japan International Cooperation Agency (JICA) (Photo 23). After the survey, we moved to a guesthouse and performed routine procedures, such as seed extraction.

Photo 23. An irrigation facility that pumps water from a pond in the Panomsai village

Photo 24. Fruits of eggplant (#118) collected from the Natalang village

Photo 25. An empty seed can of a commercial melon variety in the Natalang village

November 13, 2019: In the morning, two staff members of the Phin DAFO joined us for this day's exploration. They guided us to five villages (Natalang, Nonyangnoy, Hauyakai, Nonyang, and Saloy). From a vast farm in the Natalang village, we collected three samples of *S. melongena* (#117–119). The fruit skin color of sample #118 was purple, and the fruit was unusually large compared to the fruits of other Laotian landraces (Photo 24). However, we found empty cans of seeds of commercial melon varieties (Photo 25), indicating that imported vegetables are commonly cultivated through seeds in this area. Thereafter, we collected one sample of *S. melongena* from the Nonyangnoy village (#120), two samples of *S. melongena* from the Hauyakai village (#121 and #122), three samples of *S. melongena* from the Nonyang village (#123–125), and two samples of *S. melongena* from the Saloy village (#126 and #127). After the survey in the Phin District, we moved to the next district. On the way to a guesthouse, we stopped at the Xephon District and collected four samples of *S. melongena* (#128, #129, #131, and #132) and one sample of *S. violaceum* (#130). We then moved to a guesthouse in the Vilabouli District and, at the end of the day, extracted seeds from the collected fruits.

Photo 26. Fruits and other plant organs of eggplant (#140) collected from the Laddengyai village

Photo 27. Fruits and other plant organs of eggplant (#143) collected from the Laddengyai village

November 14, 2019: First, we met a staff member of the Vilabouli DAFO, who guided us to five villages (Boungkham, Hauyseuane, Laddengyai, Mai, and Sopa). We collected 17 samples of *S. melongena* (#133-137, #139-144, and #146-151), one sample of *S. violaceum* (#138), and one sample of *S. torvum* (#145). In the Laddengyai village, we visited a large farm, occupying 170 ha. We collected various eggplant landraces, some of which had obovate fruits with a whitish-green or purple skin (Photos 26 and 27). Notably, there were hair growing on the surface of the fruit skin of sample #140 (Photo 26). At an agricultural farm near the Mai village, many types of leafy vegetables were cultivated using an irrigation system (Photo 28), and we found the symptoms of powdery mildew (Photo 29). After the survey, we returned to the Xepon District and arrived at a guesthouse. After routine work, we organized the data of the collected samples.

November 15, 2019: First, we visited the Xepon DAFO to explain our plan and objectives to the representative and picked up a staff member (Photo 30). According to them, the main crop of the district is banana, and cassava has also become a popular crop in recent years. They guided us to three villages (Meungchan, Kenglaung, and Phonmung). We collected 11 samples of *S. melongena* (#152-156 and #158-163) and one sample of *S. aethiopicum* (#157). In the evening, we visited a guesthouse near the Vietnam border and performed routine work.

November 16, 2019: We returned by Route 9E to the Kaysone Phomvihane District and dropped off the staff member from the Savannakhet PAFO to their house. The road is in very good condition, and its construction is supported by the JICA. Next, we drove north toward the Thakhek District. The journey took 8 hours. Although we visited several small markets along the way, we could only find immature eggplant fruits.

November 17, 2019: We returned to Vientiane via Route 13S. The journey took 5 hours and 30 minutes. On the way back, we visited several small markets but could only collect immature eggplant fruits for collecting seeds.

November 18, 2019: In Vientiane, we sorted the data and obtained photographs in the morning and visited the HRC to discuss our preliminary results with S.T., the corresponding unit leader of HRC, in the afternoon. We handed over the seeds collected during the survey to the HRC staff members and discussed the plan to export them to Japan.

Photo 28. An integrated farm of many leafy vegetables with irrigation near the Mai village

Photo 29. Disease symptoms of powdery mildew observed near the Mai village

Photo 30. Discussion with the staff of the District Agriculture and Forestry Office (DAFO) of the Xepon district

Discussion

During some previous surveys in Lao PDR, it rained periodically (Saito *et al.* 2016, 2017; Hamato *et al.* 2018), although the rainy season in Lao PDR was typically over before the start of exploration. Fortunately, it did not rain during our surveys in 2019 and 2018 (Miyatake *et al*. 2019a), and the present survey proceeded without any

challenge. However, in recent years, many places in Lao PDR have experienced flooding, and people's lives are threatened during the rainy season. In 2019, the central city of the Savannakhet Province experienced heavy rains, and the resulting flood devastated many villages. Furthermore, climate change is a great concern, which may result in considerable damage to agricultural fields and threaten the conservation of genetic resources. A major problem is that the loss of genetic resources will prevent the discovery of unutilized plant material in the future.

During the present survey under the PGRAsia Project, the HRC staff members translated and explained our objectives and plans to the local people, such as the PAFO and DAFO staff. Thanks to the local staff, we could indirectly communicate with the ethnic groups. We found that the eggplant fruits collected from Savannakhet showed slight variations in shape (flattened, globular, ovoid, obovate, or ellipsoid), size (7.9 to 95.1 mm long), and skin color (green, white, or purple) (Table 3, Fig. 2). In addition, most landraces were spineless, consistent with observation in previous surveys almost across all parts of Lao PDR (Saito *et al.* 2016, 2017; Hamato *et al.* 2018; Miyatake *et al.* 2019a). As described in our previous report (Miyatake *et al.* 2019b), genetic diversity likely contributed to the phenotypic diversity of eggplant landraces collected during previous surveys in Lao PDR. However, in the present survey, we could only confirm low diversity in fruit shape and skin color compared with that in previous surveys, with most landraces bearing small, globular, and whitish-green fruits. Under the PGRAsia Project, over 1,000 accessions of eggplant and its relatives have already been collected. For comprehensive analysis, additional DNA marker-based testing of genetic diversity among the samples collected in the project is warranted.

Under the PGRAsia Project, surveys have been conducted throughout Lao PDR and specific regional characteristics have been observed. First, people in the southern and central Lao PDR, including the Savannakhet Province, rarely eat mature fruits of eggplant (Hamato *et al.* 2018; Miyatake *et al.* 2019a), while people in the northern parts prefer them (Saito *et al.* 2015, 2016, 2017). Based on our experiences during previous surveys under the PGRAsia Project, we mainly surveyed the backyards of local houses, where all young fruits are rarely harvested in time. Usually, some mature fruits are observed on eggplants, from which it is easier to collect seeds of that landraces. Second, the native Laotians typically eat eggplant relatives, such as *S. violaceum*, *S. torvum*, and *S. aethiopicum*, and many samples of these eggplant relatives were collected during this survey. However, *S. macrocarpon*, which was easily collected from the northern parts of Lao

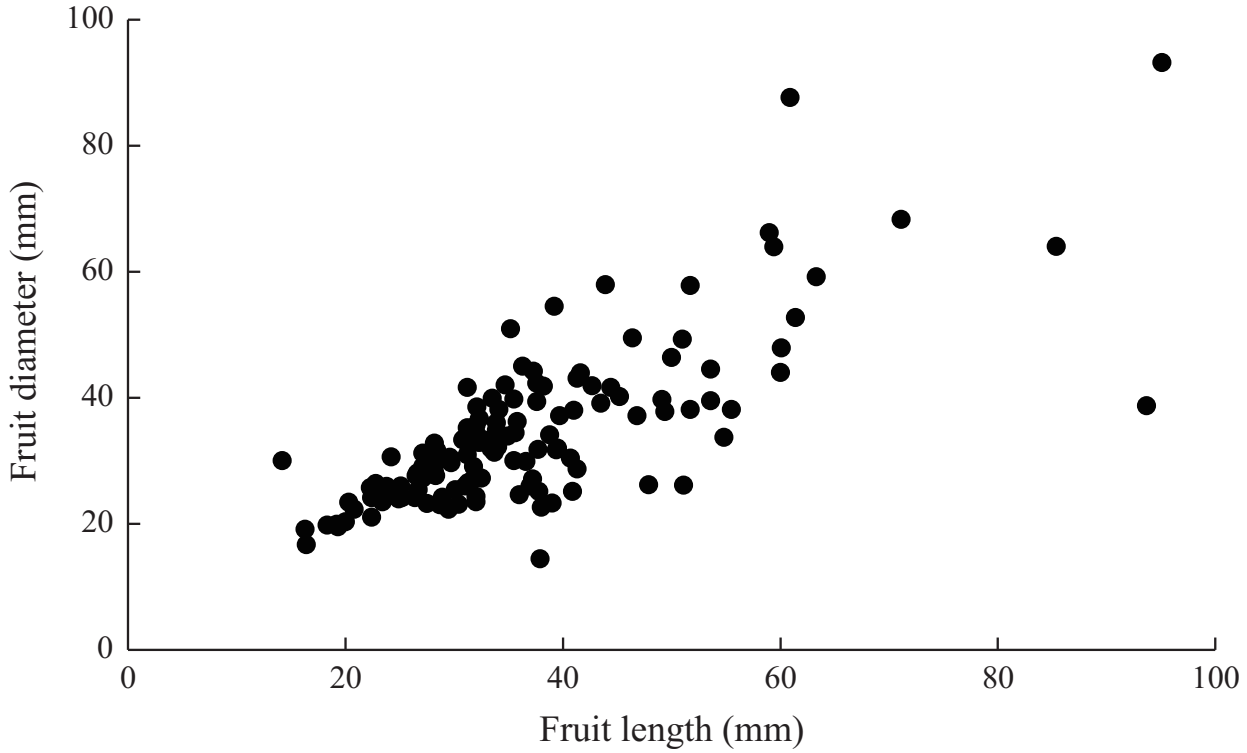

Fig. 2. Distribution of 135 *Solanum melongena* fruit samples (excluding #94, #113, #124, #125, and #163) on a scatter plot of length versus diameter.

PDR (Saito *et al.* 2015, 2016, 2017), was not collected during surveys in the southern and central parts (Hamato *et al.* 2018; Miyatake *et al.* 2019a). This indicates that the native people of the southern and central parts of Lao PDR do not typically consume the fruits of *S. macrocarpon*, as opposed to native people in the northern parts. Interestingly, the symptoms of important diseases of eggplant were only observed in integrated farmlands in the southern and central parts of Lao PDR. There are two possible reasons—high temperature that stimulates bacterial activity and use of commercial varieties susceptible to bacterial wilt. Meanwhile, most other plants seemed to be healthy, indicating that some landraces may be resistant to these diseases.

Finally, although 163 samples were collected during this survey, the heads of the PAFOs and DAFOs informed us that many other landraces can be collected from mountainous areas. For collecting additional samples from these areas, we must extend the search period and prepare appropriate vehicles.

At the end of the survey, the Japanese members of this survey team discussed and planned future cooperative activities with the HRC members, including a plan to train them to evaluate eggplant genetic resources and breed new cultivars. To date, over 1,000 accessions have been collected, of which 200 are already distributed in Japan. As usual, the seeds collected in the present survey will be propagated by self-pollination, and the HRC staff members will evaluate these new plant resources. The seeds produced the following year at the HRC will be shared among the participants of the PGRAsia Project in Lao PDR and Japan. Then, the reproduced eggplant accessions will be evaluated in Japan for resistance to *Verticillium* wilt, *Fusarium* wilt, bacterial wilt, powdery mildew, and nematode infection as well as for morphological characteristics. Based on the information obtained from future characterization, promising materials from the accessions collected during the PGRAsia Project would be identified for use in breeding.

Acknowledgments

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ラオスにおけるナス遺伝資源の共同探索，2019 年

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和文摘要

本報告は，独立行政法人農業生物資源研究所とラオス農林省国立農林業研究所（NAFRI）との間で 2014 年に締結された共同研究協定（JRA）および 2019 年に追加された補遺に基づいて行われたラオス国における 2019 年のナス遺伝資源の調査報告である．調査は，2019 年 11 月 5 ～ 20 日にかけて実施された．今回，我々はラオス国南部地域であるサワンナケート県を調査し，ナス栽培種 *Solanum melongena* 140 点およびナス近縁種を 23 点の合計 163 点の種子サンプルを収集した．当該地域におけるナスには、果皮色や果形に一定程度の多様性は確認されたものの，そのほとんどは小さな球形の緑色果実であり，これまでに実施した北部や南部での調査に比べると，多様性に乏しい傾向にあった．一方で，とげの有無については，他の地域と同様に半数程度の在来品種がとげなし性であったことは興味深い．収集した遺伝資源の種子は，NAFRI において保存されるとともに，自殖による再増殖の後，特性調査が行われる予定である．再増殖された種子は、「食料及び農業のための植物遺伝資源に関する国際条約」（ITPGRFA）に基づく定型の素材移転契約（SMTA）により農研機構遺伝資源センターに分配され，重複保存される予定である . 日本では，土壌伝染性病害虫への抵抗性などの特性が調査され，有望な育種素材が検索される予定である．

Table 3. Several characteristics of accessions collected during the 2019 survey in southern Lao People's Democratic Republic

Collection No.	Harvested fruit (immature fruit)				Skin color of mature fruit	Color of flower	Spiny (1) or spineless (0)			Collected from (tribes)	Remarks
	Skin color	Length (mm)	Length/ Diameter	Shape			Calyx	Stem	Leaf		
1	Whitish Green	34	36	Globular	Yellow	Purple	0	0	0	Lao Loum	
2	Whitish Green	38	42	Globular	Yellow	Purple	0	0	0	Lao Loum	
3	Pale Green	13	12	Globular	Brown	White	0	1	0	Lao Loum	*Solanum torvum*
4	Whitish Green	27	28	Globular	Yellow	White	0	0	0	Lao Loum	
5	Whitish Green	31	33	Globular	Yellow	Purple	0	0	0	Lao Loum	
6	Whitish Green	33	32	Globular	Yellow	Purple	0	0	0	Lao Loum	Hard skin
7	Whitish Green	49	40	Globular	Yellow	Purple	0	0	0	Lao Loum	
8	-	33	33	Globular	Yellow	Purple	0	0	0	Lao Loum	No immature fruits were observed
9	Whitish Green	37	27	Ovoid	Yellow	Purple	0	0	0	Lao Loum	
10	Whitish Green	47	37	Globular	Yellow	Purple	0	0	0	Lao Loum	
11	Whitish Green	28	29	Globular	Yellow	Purple	0	0	0	Lao Loum	
12	Whitish Green	36	36	Globular	Yellow	Purple	0	0	0	Lao Loum	
13	Whitish Green	28	30	Globular	Yellow	White	0	0	0	Lao Loum	
14	Whitish Green	38	42	Globular	Yellow	Purple	0	0	0	Lao Loum	
15	Whitish Green	50	46	Globular	Yellow	Purple	0	0	0	Lao Loum	
16	Whitish Green	34	31	Globular	Yellow	White	0	0	0	Lao Loum	
17	Whitish Green	31	31	Globular	Yellow	-	0	0	0	Lao Loum	Only fruits
18	Whitish Green	52	58	Globular	Yellow	Pale Purple	0	0	0	Lao Loum	
19	Whitish Green	30	25	Globular	Yellow	-	0	0	0	Lao Loum	Only fruits
20	Whitish Green	36	34	Globular	Yellow	-	0	0	0	Lao Loum	Only fruits
21	Whitish Green	12	11	Globular	Orange	Purple	1	1	1	Lao Loum	*Solanum violaceum*
22	Pale Green	8	9	Globular	Orange	Purple	0	0	0	Lao Loum	*Solanum violaceum*
23	Whitish Green	20	23	Globular	Yellow	-	1	1	1	Lao Loum	Only fruits
24	Whitish Green	22	26	Globular	Yellow	Purple	1	1	1	Lao Loum	Hard spines
25	Pale Green	12	12	Globular	Brown	White	0	1	0	Lao Loum	*Solanum torvum*
26	Whitish Green	23	26	Globular	Yellow	Purple	1	1	1	Lao Loum	
27	Whitish Green	23	26	Globular	Yellow	Purple	0	0	0	Lao Loum	
28	Whitish Green	32	33	Globular	Yellow	Purple	0	0	0	Lao Loum	
29	-	38	23	Globular	Yellow	White	-	1	1	Lao Loum	No immature fruits were observed
30	-	14	30	Globular	Yellow	-	0	0	0	Lao Loum	Only mature fruits
31	Whitish Green	30	30	Globular	Yellow	Purple	1	0	0	Lao Loum	Hard spines on calyx
32	Whitish Green	33	33	Globular	-	Purple	0	0	0	Lao Loum	
33	Pale Green	14	15	Globular	Brown	White	0	1	1	LaoThreng	*Solanum torvum*
34	-	36	45	Globular	Yellow	-	-	-	-	LaoThreng	Only mature fruits
35	Whitish Green	22	21	Globular	-	Purple	1	1	1	LaoThreng	
36	Whitish Green	26	24	Globular	Yellow	Purple	0	0	0	LaoThreng	
37	-	41	43	Globular	Yellow	Purple	0	0	0	LaoThreng	No immature fruits were observed

Table 3. (Continued).

Collection No.	Harvested fruit (immature fruit)				Skin color of mature fruit	Color of flower	Spiny (1) or spineless (0)			Collected from (tribes)	Remarks
	Skin color	Length (mm)	Length/ Diameter	Shape			Calyx	Stem	Leaf		
38	Whitish Green	9	10	Globular	Orange	Purple	0	1	1	LaoThreng	*Solanum violaceum*
39	Whitish Green	28	30	Globular	Yellow	-	1	1	1	LaoThreng	Only fruits
40	-	60	48	Globular	Yellow	-	0	0	0	LaoThreng	Rotten fruits
41	-	16	17	Globular	Yellow	Purple	1	1	1	LaoThreng	No immature fruits were observed
42	Whitish Green	23	24	Globular	Yellow	Purple	1	1	1	Blou	
43	-	16	15	Globular	Brown	White	0	1	0	Blou	*Solanum torvum*
44	Whitish Green	11	10	Globular	Orange	-	-	1	-	Blou	*Solanum violaceum*, only fruits
45	Whitish Green	33	33	Globular	Yellow	-	0	-	-	Blou	Only fruits
46	Greenish Purple	27	29	Globular	Yellow	-	0	-	-	Lao Loum	Only fruits
47	-	32	29	Globular	Yellow	-	0	-	-	Lao Loum	Only mature fruits
48	Whitish Green	44	42	Globular	Yellow	-	0	-	-	Lao Loum	Only fruits
49	-	56	38	-	Yellow	-	0	-	-	Lao Loum	Only seeds
50	-	20	20	Globular	Yellow	-	1	1	1	Lao Loum	Only mature fruits
51	-	27	25	Globular	Yellow	Purple	1	1	1	Lao Loum	No immature fruits were observed
52	Green	11	12	Globular	Brown	White	0	1	0	Lao Loum	*Solanum torvum*
53	-	19	20	Globular	Yellow	Purple	1	1	1	Lao Loum	No immature fruits were observed
54	Greenish Purple	10	10	Globular	Orange	Purple	0	0	0	Lao Loum	*Solanum violaceum*
55	Whitish Green	38	14	Obovate	Yellow	Purple	0	0	0	Lao Loum	
56	Whitish Green	34	32	Globular	Yellow	-	0	0	0	Lao Loum	Only fruits
57	Whitish Green	18	20	Globular	Yellow	-	1	1	1	Lao Loum	Only fruits with hard spines on calyx
58	Whitish Green	31	26	Globular	Yellow	Purple	0	0	0	Phou Thai	
59	-	27	27	Globular	Yellow	-	1	1	1	Phou Thai	Only mature fruits
60	Whitish Green	41	38	Globular	Yellow	Purple	1	1	1	Phou Thai	Hard spines
61	Whitish Green	10	10	Globular	Orange	Purple	1	1	1	Phou Thai	*Solanum* sp.
62	-	30	23	Ovoid	Yellow	Purple	0	0	0	Phou Thai	No immature fruits were observed
63	Whitish Green	40	32	Ovoid	Yellow	Purple	0	0	0	Phou Thai	
64	Pale Green	9	9	Globular	Orange	Purple	1	1	1	Phou Thai	*Solanum violaceum*
65	-	23	25	Globular	Yellow	-	1	1	1	Phou Thai	Only mature fruits
66	Pale Purple	37	26	Ovoid	Yellow	Purple	0	0	0	Phou Thai	
67	Greenish Purple	36	25	Ovoid	Yellow	Purple	0	0	0	Phou Thai	
68	Whitish Green	24	26	Globular	Yellow	-	1	1	1	Lao Loum	Only fruits
69	-	28	30	Globular	Yellow	-	1	-	-	Lao Loum	Only mature fruits
70	-	45	40	Globular	Yellow	-	0	-	-	Lao Loum	Only mature fruits
71	-	37	44	Globular	Yellow	-	0	-	-	Lao Loum	Only mature fruits with ribs on fruit
72	Whitish Green	9	11	Globular	Orange	-	1	1	-	Lao Loum	*Solanum violaceum*, only fruits
73	Whitish Green	28	28	Globular	Yellow	Purple	1	1	1	Lao Loum	Hard spines
74	Whitish Green	38	32	Globular	Yellow	Purple	0	0	0	Lao Loum	Anthocyanin accumulation on stem

Table 3. (Continued).

Collection No.	Harvested fruit (immature fruit)				Skin color of mature fruit	Color of flower	Spiny (1) or spineless (0)			Collected from (tribes)	Remarks
	Skin color	Length (mm)	Length/ Diameter	Shape			Calyx	Stem	Leaf		
75	Greenish Purple	10	10	Globular	Orange	Purple	1	1	1	Phou Thai	*Solanum violaceum*
76	Whitish Green	25	26	Globular	Yellow	Purple	0	0	0	Lao Loum	
77	Whitish Green	22	24	Globular	Yellow	White	1	1	1	Lao Loum	Hard spines, no immature fruits
78	Whitish Green	25	24	Globular	Yellow	Purple	1	1	1	Lao Loum	
79	-	63	27	-	Yellow	Purple	0	1	1	Lao Loum	Hard spines, no immature fruits
80	Whitish Green	44	39	Globular	Yellow	Purple	0	0	0	Lao Loum	
81	Green	14	14	Globular	Brown	White	0	1	0	Lao Threng	*Solanum torvum*
82	Whitish Green	32	24	Ovoid	Yellow	Purple	0	0	0	Lao Loum	
83	White	35	34	Globular	Yellow	Purple	0	0	0	Lao Loum	
84	Whitish Green	85	64	Globular	Yellow	Purple	0	0	0	Lao Loum	Ribs on fruit
85	Whitish Green	36	30	Globular	Yellow	Purple	1	1	1	Phou Thai	Anthocyanin accumulation on spines
86	Whitish Green	21	22	Globular	Yellow	Purple	1	1	1	Phou Thai	
87	Whitish Green	54	45	Globular	Yellow	White	0	0	0	Phou Thai	
88	Whitish Green	41	30	Ovoid	Yellow	Purple	0	0	0	Phou Thai	
89	Whitish Green	35	42	Flattened	Yellow	White	1	1	1	Phou Thai	
90	Whitish Green	10	9	Globular	Orange	Purple	1	1	1	Phou Thai	*Solanum violaceum*
91	White	32	24	Ovoid	Yellow	Purple	0	0	0	Phou Thai	
92	Whitish Green	28	32	Globular	Yellow	-	0	0	0	Lao Loum	No flowers were observed
93	Whitish Green	39	32	Ovoid	Yellow	Purple	0	0	0	Lao Loum	
94	Whitish Green	-	-	-	-	-	-	-	-	Lao Loum	Only seeds
95	White	39	23	Obovate	Yellow	Purple	0	0	0	Lao Loum	
96	White	29	24	Globular	Yellow	-	0	0	0	Lao Loum	No flowers were observed
97	Whitish Green	34	38	Globular	Yellow	-	0	0	0	Lao Loum	Only fruits
98	Whitish Green	48	26	Obovate	Yellow	Purple	0	0	0	Lao Loum	
99	Whitish Green	39	34	Globular	Yellow	Purple	0	0	0	Lao Loum	
100	Whitish Green	27	31	Globular	Yellow	Purple	1	1	1	Lao Loum	
101	Whitish Green	30	31	Globular	Yellow	Purple	0	0	0	Lao Loum	
102	-	30	22	Globular	Yellow	-	0	0	0	Lao Loum	Only mature fruits
103	Pale Green	8	9	Globular	Orange	Purple	1	1	1	Lao Loum	*Solanum violaceum*
104	Pale Green	28	23	Globular	Yellow	White	0	0	0	Lao Loum	
105	Whitish Green	31	27	Globular	Yellow	Purple	0	0	0	Lao Loum	
106	Whitish Green	31	42	Flattened	Yellow	Purple	0	0	0	Lao Loum	Ribs on fruit
107	Whitish Green	55	34	Obovate	Yellow	-	1	1	1	Lao Loum	No flowers were observed
108	Whitish Green	25	24	Globular	Yellow	Purple	1	1	1	Lao Loum	Hard spines
109	Whitish Green	38	25	Obovate	Yellow	Purple	0	0	0	Lao Loum	
110	Whitish Green	61	53	Globular	Yellow	Purple	0	0	0	Lao Loum	
111	Whitish Green	59	66	Globular	Yellow	Purple	0	0	0	Phou Thai	

Table 3. (Continued).

Collection No.	Harvested fruit (immature fruit)				Skin color of mature fruit	Color of flower	Spiny (1) or spineless (0)			Collected from (tribes)	Remarks
	Skin color	Length (mm)	Length/ Diameter	Shape			Calyx	Stem	Leaf		
112	White	32	52	Flattened	Yellow	White	0	0	0	Phou Thai	Ribs on fruit
113	Pale Green	-	-	-	-	White	0	0	0	Lao Loum	No mature fruits
114	Greenish Purple	28	28	Globular	Yellow	Purple	0	0	0	Lao Loum	Anthocyanin accumulation on spines
115	Whitish Green	34	40	Flattened	Yellow	-	-	-	-	Lao Loum	Only fruits
116	Whitish Green	42	44	Globular	Yellow	Purple	1	1	1	Lao Loum	
117	Whitish Green	31	34	Globular	Yellow	Purple	0	0	0	Lao Loum	
118	Greenish Purple	95	93	Globular	-	-	0	-	-	Lao Loum	
119	Whitish Green	24	31	Globular	Yellow	Purple	1	1	1	Lao Loum	Anthocyanin accumulation on spines
120	Greenish Purple	71	68	Globular	-	White	1	0	0	Phou Thai	
121	-	32	39	Flattened	Yellow	-	0	-	-	Lao Threng	Only mature fruits with ribs on fruit
122	Whitish Green	44	58	Flattened	Yellow	-	0	-	-	Lao Threng	Only mature fruits with ribs on fruit
123	Whitish Green	31	35	Globular	Yellow	Purple	1	1	1	Phou Thai	
124	-	-	-	-	-	-	-	-	-	Phou Thai	Only seeds
125	White	-	-	-	Yellow	-	-	-	-	Phou Thai	Only seeds
126	-	16	19	Globular	Yellow	Purple	1	1	1	Makorng	Hard spines, no immature fruits
127	-	35	51	Flattened	Yellow	-	1	-	-	Makorng	Only mature fruits with ribs on fruit
128	Whitish Green	29	23	Globular	Yellow	White	1	1	1	Lao Loum	
129	Whitish Green	24	25	Globular	Yellow	White	1	1	1	Lao Loum	Hard spines
130	Pale Green	9	11	Globular	Orange	Purple	1	1	1	Lao Loum	*Solanum violaceum*
131	Whitish Green	19	20	Globular	Yellow	White	1	1	1	Lao Loum	
132	White	41	25	Ovoid	Yellow	White	0	0	0	Lao Threng	
133	Whitish Green	36	40	Globular	Yellow	Purple	0	0	0	Phou Thai	
134	-	32	36	Globular	Yellow	Purple	1	1	1	Phou Thai	No immature fruits were observed
135	Whitish Green	32	37	Globular	Yellow	White	1	1	1	Phou Thai	
136	Whitish Green	52	38	Ovoid	Yellow	Purple	0	0	0	Phou Thai	
137	Whitish Green	46	50	Globular	Yellow	Purple	0	0	0	Makorng	Hairy leaves
138	Whitish Green	8	10	Globular	Orange	Purple	1	1	1	Makorng	*Solanum violaceum*
139	Greenish Purple	28	33	Globular	Yellow	-	0	0	0	Makorng	No flowers were observed
140	Whitish Green	51	26	Obovate	Yellow	Purple	0	0	0	Lao Loum	Hairy fruits and leaves
141	Whitish Green	60	44	Obovate	Yellow	Purple	0	0	0	Lao Loum	
142	Whitish Green	54	40	Ovoid	Yellow	-	0	0	0	Lao Loum	No flowers were observed
143	Pale Purple	37	30	Ovoid	Yellow	Purple	0	0	0	Lao Loum	
144	Pale Purple	32	27	Globular	Yellow	Purple	0	0	0	Lao Loum	
145	Green	14	14	Globular	Brown	White	0	1	0	Lao Loum	*Solanum torvum*
146	Whitish Green	51	49	Globular	Yellow	White	0	0	0	Lao Loum	Ribs on fruit
147	Pale Green	39	55	Flattened	Yellow	Purple	0	0	0	Phou Thai	
148	Whitish Green	61	88	Flattened	Yellow	-	1	0	0	Phou Thai	Ribs on fruit, no flowers were observed

Table 3. (Continued).

Collection No.	Harvested fruit (immature fruit)				Skin color of mature fruit	Color of flower	Spiny (1) or spineless (0)			Collected from (tribes)	Remarks
	Skin color	Length (mm)	Length/ Diameter	Shape			Calyx	Stem	Leaf		
149	Whitish Green	49	38	Ovoid	Yellow	-	1	1	1	Phou Thai	No flowers were observed
150	White	40	37	Globular	Yellow	Purple	0	0	0	Phou Thai	
151	Whitish Green	59	64	Globular	Yellow	-	0	-	-	Phou Thai	Only fruits
152	White	38	39	Globular	Yellow	Purple	0	0	0	Phou Thai	
153	Whitish Green	43	42	Globular	Yellow	Purple	1	1	1	Phou Thai	
154	Pale Green	32	33	Globular	Yellow	Purple	0	0	0	Phou Thai	Ribs on fruit
155	White	41	29	Ovoid	Yellow	White	0	0	0	Phou Thai	
156	Whitish Green	63	59	Globular	Yellow	-	0	0	0	Makorng	No immature fruits and flowers were observed
157	Pale Green	20	30	Flattened	-	White	0	0	0	Phou Thai	*Solanum aethiopicum*
158	Greenish Purple	34	35	Globular	Yellow	Purple	0	0	0	Phou Thai	
159	Whitish Green	33	27	Ovoid	Yellow	White	0	0	0	Phou Thai	
160	Pale Purple	32	34	Globular	Yellow	Purple	0	0	0	Phou Thai	
161	Greenish Purple	27	28	Globular	Yellow	Purple	1	1	1	Phou Thai	Anthocyanin accumulation on spines
162	Whitish Green	94	39	Ellipsoid	Yellow	Purple	0	0	0	Lao Loum	
163	Green	-	-	Flattened	-	-	-	-	-	Phou Thai	Only seeds

Table 4. The list of *Solanum* genetic resources collected

Coll. No.	JP No.	Passport No.	JP Name	Date	Genus and species	Province / State	District	Village	North latitude	East longitude	Elevation (m)	Source	Status	Local name
1	270807	30078581	COL/LAOS/2019/NIVFS-HRC/001	8-Nov.	*S. melongena*	Savannakhet	Champhon	Kangkoktong	16.27.09.51	105.11.24.04	142	backyard	landrace	Keukhon
2	270808	30078582	COL/LAOS/2019/NIVFS-HRC/002	8-Nov.	*S. melongena*	Savannakhet	Champhon	Nonvilayvhan	16.26.52.44	105.12.57.51	142	farmland	landrace	Keukeun
3	270809	30078583	COL/LAOS/2019/NIVFS-HRC/003	8-Nov.	*S. torvum*	Savannakhet	Champhon	Nonvilayvhan	16.26.53.24	105.13.00.74	145	farmland	wild	Markkeng
4	270810	30078584	COL/LAOS/2019/NIVFS-HRC/004	8-Nov.	*S. melongena*	Savannakhet	Champhon	Nonvilayvhan	16.26.52.14	105.13.00.76	139	farmland	landrace	Keupor
5	270811	30078585	COL/LAOS/2019/NIVFS-HRC/005	8-Nov.	*S. melongena*	Savannakhet	Champhon	Nonvilayvhan	16.26.52.14	105.13.00.76	139	farmland	landrace	Keupor
6	270812	30078586	COL/LAOS/2019/NIVFS-HRC/006	8-Nov.	*S. melongena*	Savannakhet	Champhon	Nonvilayvhan	16.26.52.14	105.13.00.76	139	farmland	landrace	Keuyarb
7	270813	30078587	COL/LAOS/2019/NIVFS-HRC/007	8-Nov.	*S. melongena*	Savannakhet	Champhon	Nonvilayvhan	16.27.01.86	105.12.59.25	144	farmland	landrace	Kangkob
8	270814	30078588	COL/LAOS/2019/NIVFS-HRC/008	8-Nov.	*S. melongena*	Savannakhet	Champhon	Nonvilayvhan	16.27.04.86	105.12.59.25	144	farmland	landrace	Keukeun
9	270815	30078589	COL/LAOS/2019/NIVFS-HRC/009	8-Nov.	*S. melongena*	Savannakhet	Champhon	Nonvilayvhan	16.27.04.86	105.12.59.25	144	farmland	landrace	Hamling
10	270816	30078590	COL/LAOS/2019/NIVFS-HRC/010	8-Nov.	*S. melongena*	Savannakhet	Champhon	Nonvilayvhan	16.27.04.86	105.12.59.25	144	farmland	landrace	Kangkob
11	270817	30078591	COL/LAOS/2019/NIVFS-HRC/011	8-Nov.	*S. melongena*	Savannakhet	Champhon	Nonvilayvhan	16.27.06.92	105.13.02.85	143	farmland	landrace	Keukeun
12	270818	30078592	COL/LAOS/2019/NIVFS-HRC/012	8-Nov.	*S. melongena*	Savannakhet	Champhon	Nonvilayvhan	16.27.06.92	105.13.02.85	143	farmland	landrace	Keukeun
13	270819	30078593	COL/LAOS/2019/NIVFS-HRC/013	8-Nov.	*S. melongena*	Savannakhet	Champhon	Nonvilayvhan	16.27.06.92	105.13.02.85	143	farmland	landrace	Keukeun
14	270820	30078594	COL/LAOS/2019/NIVFS-HRC/014	8-Nov.	*S. melongena*	Savannakhet	Champhon	Nonvilayvhan	16.27.06.92	105.13.02.85	143	farmland	landrace	Keukeun
15	270821	30078595	COL/LAOS/2019/NIVFS-HRC/015	8-Nov.	*S. melongena*	Savannakhet	Champhon	Nonvilayvhan	16.27.06.92	105.13.02.85	143	farmland	landrace	Keutamada
16	270822	30078596	COL/LAOS/2019/NIVFS-HRC/016	8-Nov.	*S. melongena*	Savannakhet	Champhon	Nonvilayvhan	16.27.06.92	105.13.02.85	143	farmland	landrace	Keutamada
17	270823	30078597	COL/LAOS/2019/NIVFS-HRC/017	8-Nov.	*S. melongena*	Savannakhet	Champhon	Nonvilayvhan	16.27.06.92	105.13.02.85	143	farmland	landrace	Keukeun
18	270824	30078598	COL/LAOS/2019/NIVFS-HRC/018	8-Nov.	*S. melongena*	Savannakhet	Champhon	Dongkhammeune	16.26.11.57	105.11.09.02	145	farmland	landrace	Keuyai
19	270825	30078599	COL/LAOS/2019/NIVFS-HRC/019	8-Nov.	*S. melongena*	Savannakhet	Champhon	Dongkhammeune	16.26.11.57	105.11.09.02	145	farmland	landrace	Keukeun
20	270826	30078600	COL/LAOS/2019/NIVFS-HRC/020	8-Nov.	*S. melongena*	Savannakhet	Champhon	Dongkhammeune	16.26.11.57	105.11.09.02	145	farmland	landrace	Keukeun
21	270827	30078601	COL/LAOS/2019/NIVFS-HRC/021	8-Nov.	*S. violaceum*	Savannakhet	Champhon	Dongkhammeune	16.26.11.57	105.11.09.02	145	farmland	landrace	Kangkhom
22	270828	30078602	COL/LAOS/2019/NIVFS-HRC/022	8-Nov.	*S. violaceum*	Savannakhet	Champhon	Dongkhammeune	16.26.14.56	105.11.00.42	139	farmland	landrace	Kangkhom
23	270829	30078603	COL/LAOS/2019/NIVFS-HRC/023	8-Nov.	*S. melongena*	Savannakhet	Champhon	Dongkhammeune	16.26.15.90	105.10.48.42	138	backyard	landrace	Keukeun
24	270830	30078604	COL/LAOS/2019/NIVFS-HRC/024	8-Nov.	*S. melongena*	Savannakhet	Champhon	Dongkhammeune	16.26.15.90	105.10.48.42	138	backyard	landrace	Keukeun
25	270831	30078605	COL/LAOS/2019/NIVFS-HRC/025	9-Nov.	*S. torvum*	Savannakhet	Xonbouli	Nonsavang	16.23.42.18	105.20.16.08	153	farmland	landrace	Markkeng
26	270832	30078606	COL/LAOS/2019/NIVFS-HRC/026	9-Nov.	*S. melongena*	Savannakhet	Xonbouli	Nonsavang	16.23.23.81	105.20.30.63	153	backyard	landrace	Keukeun
27	270833	30078607	COL/LAOS/2019/NIVFS-HRC/027	9-Nov.	*S. melongena*	Savannakhet	Xonbouli	Nonsavang	16.23.19.45	105.20.29.91	152	backyard	landrace	Keutoakae
28	270834	30078608	COL/LAOS/2019/NIVFS-HRC/028	9-Nov.	*S. melongena*	Savannakhet	Xonbouli	Nonsavang	16.23.10.60	105.20.30.47	145	farmland	landrace	Keukeun
29	270835	30078609	COL/LAOS/2019/NIVFS-HRC/029	9-Nov.	*S. melongena*	Savannakhet	Xonbouli	Nonsavang	16.23.10.60	105.20.30.47	145	farmland	landrace	Keukeun
30	270836	30078610	COL/LAOS/2019/NIVFS-HRC/030	9-Nov.	*S. melongena*	Savannakhet	Xonbouli	Nonsavang	16.23.10.60	105.20.30.47	145	farmland	landrace	Keukeun
31	270837	30078611	COL/LAOS/2019/NIVFS-HRC/031	9-Nov.	*S. melongena*	Savannakhet	Xonbouli	Nonsavang	16.23.14.67	105.20.33.22	143	farmland	landrace	Keukeun
32	270838	30078612	COL/LAOS/2019/NIVFS-HRC/032	9-Nov.	*S. melongena*	Savannakhet	Xonbouli	Nonsavang	16.23.14.67	105.20.33.22	143	farmland	landrace	Keuvan
33	270839	30078613	COL/LAOS/2019/NIVFS-HRC/033	9-Nov.	*S. torvum*	Savannakhet	Xonbouli	Donghongkham	16.23.52.97	105.24.18.10	144	backyard	landrace	Keng
34	270840	30078614	COL/LAOS/2019/NIVFS-HRC/034	9-Nov.	*S. melongena*	Savannakhet	Xonbouli	Donghongkham	16.23.53.52	105.24.13.02	151	farmland	landrace	Keukeun
35	270841	30078615	COL/LAOS/2019/NIVFS-HRC/035	9-Nov.	*S. melongena*	Savannakhet	Xonbouli	Donghongkham	16.23.52.47	105.24.03.32	144	backyard	landrace	Keukeun
36	270842	30078616	COL/LAOS/2019/NIVFS-HRC/036	9-Nov.	*S. melongena*	Savannakhet	Xonbouli	Donghongkham	16.23.54.78	105.24.03.11	148	backyard	landrace	Keukeun
37	270843	30078617	COL/LAOS/2019/NIVFS-HRC/037	9-Nov.	*S. melongena*	Savannakhet	Xonbouli	Donghongkham	16.23.54.78	105.24.03.11	148	backyard	landrace	Keuphone
38	270844	30078618	COL/LAOS/2019/NIVFS-HRC/038	9-Nov.	*S. violaceum*	Savannakhet	Xonbouli	Donghongkham	16.23.54.78	105.24.03.11	148	farmland	landrace	Kengkhom
39	270845	30078619	COL/LAOS/2019/NIVFS-HRC/039	9-Nov.	*S. melongena*	Savannakhet	Xonbouli	Donghongkham	16.23.54.78	105.24.03.11	148	backyard	landrace	Keukeun

Table 4. (Continued).

Coll. No.	JP No.	Passport No.	JP Name	Date	Genus and species	Province / State	District	Village	North latitude	East longitude	Elevation (m)	Source	Status	Local name
40	270846	30078620	COL/LAOS/2019/NIVFS-HRC/040	9-Nov.	*S. melongena*	Savannakhet	Xonbouli	Donghongkham	16.23.54.78	105.24.03.11	148	farmland	landrace	Keuit
41	270847	30078621	COL/LAOS/2019/NIVFS-HRC/041	9-Nov.	*S. melongena*	Savannakhet	Xonbouli	Donghongkham	16.23.59.16	105.24.04.01	148	backyard	landrace	Keukeun
42	270848	30078622	COL/LAOS/2019/NIVFS-HRC/042	9-Nov.	*S. melongena*	Savannakhet	Xonbouli	Kabao	16.27.17.55	105.25.53.21	146	backyard	landrace	Keukeun
43	270849	30078623	COL/LAOS/2019/NIVFS-HRC/043	9-Nov.	*S. torvum*	Savannakhet	Xonbouli	Kabao	16.27.18.99	105.25.46.30	148	farmland	landrace	-
44	270850	30078624	COL/LAOS/2019/NIVFS-HRC/044	9-Nov.	*S. violaceum*	Savannakhet	Xonbouli	Kabao	16.26.57.36	105.25.43.69	140	farmland	landrace	Kengkhom
45	270851	30078625	COL/LAOS/2019/NIVFS-HRC/045	9-Nov.	*S. melongena*	Savannakhet	Xonbouli	Kabao	16.26.57.36	105.25.43.69	140	farmland	landrace	Keuvan
46	270852	30078626	COL/LAOS/2019/NIVFS-HRC/046	9-Nov.	*S. melongena*	Savannakhet	Xonbouli	Vangkhonkham	16.27.16.81	105.24.47.98	143	farmland	landrace	Keuvan
47	270853	30078627	COL/LAOS/2019/NIVFS-HRC/047	9-Nov.	*S. melongena*	Savannakhet	Xonbouli	Vangkhonkham	16.24.57.75	105.24.33.35	142	farmland	landrace	Keuvan
48	270854	30078628	COL/LAOS/2019/NIVFS-HRC/048	9-Nov.	*S. melongena*	Savannakhet	Xonbouli	Vangkhonkham	16.24.57.75	105.24.33.35	142	farmland	landrace	Keuvan
49	270855	30078629	COL/LAOS/2019/NIVFS-HRC/049	9-Nov.	*S. melongena*	Savannakhet	Xonbouli	Vangkhonkham	16.24.57.75	105.24.33.35	142	farmland	landrace	Keukao
50	270856	30078630	COL/LAOS/2019/NIVFS-HRC/050	9-Nov.	*S. melongena*	Savannakhet	Xonbouli	Vangkhonkham	16.24.57.75	105.24.33.35	142	farmland	landrace	-
51	270857	30078631	COL/LAOS/2019/NIVFS-HRC/051	9-Nov.	*S. melongena*	Savannakhet	Xonbouli	Khamnoy	16.29.57.77	105.04.43.78	163	backyard	landrace	Keukeun
52	270858	30078632	COL/LAOS/2019/NIVFS-HRC/052	10-Nov.	*S. torvum*	Savannakhet	Songkhon	Parksong	16.14.10.79	105.12.12.41	167	backyard	landrace	Markeng
53	270859	30078633	COL/LAOS/2019/NIVFS-HRC/053	10-Nov.	*S. melongena*	Savannakhet	Songkhon	Parksong	16.14.11.53	105.12.08.13	167	backyard	landrace	Keukeun
54	270860	30078634	COL/LAOS/2019/NIVFS-HRC/054	10-Nov.	*S. violaceum*	Savannakhet	Songkhon	Nonsomboun	16.14.24.52	105.10.03.09	178	farmland	landrace	Markkengkhom
55	270861	30078635	COL/LAOS/2019/NIVFS-HRC/055	10-Nov.	*S. melongena*	Savannakhet	Songkhon	Nonsomboun	16.14.38.75	105.10.12.82	174	farmland	landrace	Keuhumling
56	270862	30078636	COL/LAOS/2019/NIVFS-HRC/056	10-Nov.	*S. melongena*	Savannakhet	Songkhon	Nonsomboun	16.14.37.28	105.10.14.90	174	backyard	landrace	Keukeun
57	270863	30078637	COL/LAOS/2019/NIVFS-HRC/057	10-Nov.	*S. melongena*	Savannakhet	Songkhon	Nonsomboun	16.14.37.28	105.10.14.90	174	backyard	landrace	Keukeun
58	270864	30078638	COL/LAOS/2019/NIVFS-HRC/058	10-Nov.	*S. melongena*	Savannakhet	Songkhon	Nonghai	16.16.22.05	105.11.08.12	156	farmland	landrace	Koupoy
59	270865	30078639	COL/LAOS/2019/NIVFS-HRC/059	10-Nov.	*S. melongena*	Savannakhet	Songkhon	Nonghai	16.16.23.26	105.11.11.66	153	backyard	landrace	Keukeun
60	270866	30078640	COL/LAOS/2019/NIVFS-HRC/060	10-Nov.	*S. melongena*	Savannakhet	Songkhon	Nonghai	16.16.23.26	105.11.11.66	153	backyard	landrace	Keukeun
61	270867	30078641	COL/LAOS/2019/NIVFS-HRC/061	10-Nov.	*Solanum* sp.	Savannakhet	Songkhon	Nonghai	16.16.24.28	105.11.07.79	157	backyard	wild	Kengkhomkeu
62	270868	30078642	COL/LAOS/2019/NIVFS-HRC/062	10-Nov.	*S. melongena*	Savannakhet	Songkhon	Nonghai	16.16.24.28	105.11.07.79	157	backyard	landrace	Keulaer
63	270869	30078643	COL/LAOS/2019/NIVFS-HRC/063	10-Nov.	*S. melongena*	Savannakhet	Songkhon	Nonghai	16.16.23.87	105.11.07.48	156	farmland	landrace	Keutoukae
64	270870	30078644	COL/LAOS/2019/NIVFS-HRC/064	10-Nov.	*S. violaceum*	Savannakhet	Songkhon	Nonghai	16.16.17.77	105.11.03.84	152	backyard	landrace	Kengkhom
65	270871	30078645	COL/LAOS/2019/NIVFS-HRC/065	10-Nov.	*S. melongena*	Savannakhet	Songkhon	Nakala	16.16.32.24	105.19.36.99	165	farmland	landrace	Keukeunname
66	270872	30078646	COL/LAOS/2019/NIVFS-HRC/066	10-Nov.	*S. melongena*	Savannakhet	Songkhon	Nakala	16.16.32.24	105.19.36.99	165	farmland	landrace	Keuitnoy
67	270873	30078647	COL/LAOS/2019/NIVFS-HRC/067	10-Nov.	*S. melongena*	Savannakhet	Songkhon	Nakala	16.16.32.24	105.19.36.99	165	farmland	landrace	Keuit
68	270874	30078648	COL/LAOS/2019/NIVFS-HRC/068	10-Nov.	*S. melongena*	Savannakhet	Xaiphouthong	Phoaykeo	16.22.40.24	105.06.22.53	195	backyard	landrace	Keukeun
69	270875	30078649	COL/LAOS/2019/NIVFS-HRC/069	10-Nov.	*S. melongena*	Savannakhet	Xaiphouthong	Palay	16.24.53.20	105.05.37.55	183	village market	landrace	Keukeun
70	270876	30078650	COL/LAOS/2019/NIVFS-HRC/070	10-Nov.	*S. melongena*	Savannakhet	Xaiphouthong	Nasay	16.24.53.20	105.05.37.55	183	village market	landrace	Keupoy
71	270877	30078651	COL/LAOS/2019/NIVFS-HRC/071	10-Nov.	*S. melongena*	Savannakhet	Xaiphouthong	Nasay	16.24.53.20	105.05.37.55	183	village market	landrace	Keupoy
72	270878	30078652	COL/LAOS/2019/NIVFS-HRC/072	10-Nov.	*S. violaceum*	Savannakhet	Xaiphouthong	Nasay	16.24.53.20	105.05.37.55	183	village market	landrace	Kengkhom
73	270879	30078653	COL/LAOS/2019/NIVFS-HRC/073	10-Nov.	*S. melongena*	Savannakhet	Outhoumphon	Nachan	16.36.06.48	105.01.39.86	180	backyard	landrace	Keukeun
74	270880	30078654	COL/LAOS/2019/NIVFS-HRC/074	10-Nov.	*S. melongena*	Savannakhet	Outhoumphon	Nachan	16.36.06.48	105.01.39.86	180	backyard	landrace	Keuphorm

Table 4. (Continued).

Coll. No.	JP No.	Passport No.	JP Name	Date	Genus and species	Province / State	District	Village	North latitude	East longitude	Elevation (m)	Source	Status	Local name
75	270881	30078655	COL/LAOS/2019/NIVFS-HRC/075	10-Nov.	*S. violaceum*	Savannakhet	Outhoumphon	Phinneua	16.38.23.58	105.00.54.37	181	backyard	landrace	Kengkhom
76	270882	30078656	COL/LAOS/2019/NIVFS-HRC/076	10-Nov.	*S. melongena*	Savannakhet	Outhoumphon	Xeno	16.40.37.11	104.59.24.71	195	backyard	landrace	Keukeun
77	270883	30078657	COL/LAOS/2019/NIVFS-HRC/077	10-Nov.	*S. melongena*	Savannakhet	Outhoumphon	Xeno	16.40.37.11	104.59.24.71	195	backyard	landrace	Keukeundokao
78	270884	30078658	COL/LAOS/2019/NIVFS-HRC/078	11-Nov.	*S. melongena*	Savannakhet	Outhoumphon	Jalernsouk	16.40.49.00	105.00.56.60	192	backyard	landrace	Keukeun
79	270885	30078659	COL/LAOS/2019/NIVFS-HRC/079	11-Nov.	*S. mammosum*	Savannakhet	Outhoumphon	Xaisaorad	16.41.09.67	105.02.24.35	189	backyard	wild	Keubar
80	270886	30078660	COL/LAOS/2019/NIVFS-HRC/080	11-Nov.	*S. melongena*	Savannakhet	Outhoumphon	Xaisaorad	16.41.09.67	105.02.24.35	189	backyard	landrace	Keukangkob
81	270887	30078661	COL/LAOS/2019/NIVFS-HRC/081	11-Nov.	*S. torvum*	Savannakhet	Outhoumphon	Vangkam	16.41.30.93	105.04.22.18	194	farmland	landrace	Markkeng
82	270888	30078662	COL/LAOS/2019/NIVFS-HRC/082	11-Nov.	*S. melongena*	Savannakhet	Outhoumphon	Nonvilay	16.41.22.64	105.06.51.05	177	farmland	landrace	Keulay
83	270889	30078663	COL/LAOS/2019/NIVFS-HRC/083	11-Nov.	*S. melongena*	Savannakhet	Outhoumphon	Nonvilay	16.41.22.64	105.06.51.05	177	farmland	landrace	Keukaoporm
84	270890	30078664	COL/LAOS/2019/NIVFS-HRC/084	11-Nov.	*S. melongena*	Savannakhet	Outhoumphon	Nonvilay	16.41.26.49	105.16.50.22	177	backyard	landrace	Keupormyai
85	270891	30078665	COL/LAOS/2019/NIVFS-HRC/085	11-Nov.	*S. melongena*	Savannakhet	Outhoumphon	Nonvilay	16.41.32.46	105.06.45.59	175	farmland	landrace	Keukeun
86	270892	30078666	COL/LAOS/2019/NIVFS-HRC/086	11-Nov.	*S. melongena*	Savannakhet	Outhoumphon	Nonvilay	16.41.32.46	105.06.45.59	175	farmland	landrace	Keukeunoy
87	270893	30078667	COL/LAOS/2019/NIVFS-HRC/087	11-Nov.	*S. melongena*	Savannakhet	Outhoumphon	Nonvilay	16.41.36.87	105.07.01.07	175	backyard	landrace	Keupormkao
88	270894	30078668	COL/LAOS/2019/NIVFS-HRC/088	11-Nov.	*S. melongena*	Savannakhet	Outhoumphon	Laojai	16.42.32.64	105.01.37.41	163	farmland	landrace	Keuvan
89	270895	30078669	COL/LAOS/2019/NIVFS-HRC/089	11-Nov.	*S. melongena*	Savannakhet	Outhoumphon	Laojai	16.42.32.64	105.01.37.41	163	farmland	landrace	Keukeun
90	270896	30078670	COL/LAOS/2019/NIVFS-HRC/090	11-Nov.	*S. violaceum*	Savannakhet	Outhoumphon	Laojai	16.42.32.69	105.00.31.00	171	farmland	landrace	Kengkom
91	270897	30078671	COL/LAOS/2019/NIVFS-HRC/091	11-Nov.	*S. melongena*	Savannakhet	Outhoumphon	Laojai	16.42.36.23	105.07.36.36	172	farmland	landrace	Keupor
92	270898	30078672	COL/LAOS/2019/NIVFS-HRC/092	11-Nov.	*S. melongena*	Savannakhet	Atsaphangthong	Haumeung	16.42.03.91	105.20.49.81	172	backyard	landrace	Keukeun
93	270899	30078673	COL/LAOS/2019/NIVFS-HRC/093	11-Nov.	*S. melongena*	Savannakhet	Atsaphangthong	Dongkhaung	16.40.25.08	105.18.15.86	153	backyard	landrace	Markkeu
94	270900	30078674	COL/LAOS/2019/NIVFS-HRC/094	11-Nov.	*S. melongena*	Savannakhet	Atsaphangthong	Dongkhaung	16.40.26.48	105.18.12.82	151	farmland	landrace	Keulay
95	270901	30078675	COL/LAOS/2019/NIVFS-HRC/095	11-Nov.	*S. melongena*	Savannakhet	Atsaphangthong	Dongkhaung	16.40.29.27	105.18.09.05	158	backyard	landrace	Keukao
96	270902	30078676	COL/LAOS/2019/NIVFS-HRC/096	11-Nov.	*S. melongena*	Savannakhet	Atsaphangthong	Dongkhaung	16.41.29.46	105.18.03.89	156	backyard	landrace	Keukao
97	270903	30078677	COL/LAOS/2019/NIVFS-HRC/097	11-Nov.	*S. melongena*	Savannakhet	Atsaphangthong	Dongkhaung	16.40.29.96	105.18.02.66	156	backyard	landrace	Keukangkob
98	270904	30078678	COL/LAOS/2019/NIVFS-HRC/098	11-Nov.	*S. melongena*	Savannakhet	Atsaphangthong	Dongkhaung	16.40.29.96	105.18.02.66	156	backyard	landrace	Keupor
99	270905	30078679	COL/LAOS/2019/NIVFS-HRC/099	11-Nov.	*S. melongena*	Savannakhet	Atsaphangthong	Haumeung	16.41.59.62	105.20.50.46	181	farmland	landrace	Keuna
100	270906	30078680	COL/LAOS/2019/NIVFS-HRC/100	12-Nov.	*S. melongena*	Savannakhet	Phalanxai	Namarkme	16.38.42.04	105.33.39.26	153	farmland	landrace	Keukeun
101	270907	30078681	COL/LAOS/2019/NIVFS-HRC/101	12-Nov.	*S. melongena*	Savannakhet	Phalanxai	Namarkme	16.38.43.18	105.33.42.13	153	farmland	landrace	Keukeun
102	270908	30078682	COL/LAOS/2019/NIVFS-HRC/102	12-Nov.	*S. melongena*	Savannakhet	Phalanxai	Namarkme	16.38.39.90	105.33.41.24	154	farmland	landrace	Keunoy
103	270909	30078683	COL/LAOS/2019/NIVFS-HRC/103	12-Nov.	*S. violaceum*	Savannakhet	Phalanxai	Namarkme	16.38.45.66	105.33.39.73	156	farmland	landrace	Markkeng
104	270910	30078684	COL/LAOS/2019/NIVFS-HRC/104	12-Nov.	*S. melongena*	Savannakhet	Phalanxai	Namarkme	16.39.02.62	105.33.40.41	156	backyard	landrace	Keupor
105	270911	30078685	COL/LAOS/2019/NIVFS-HRC/105	12-Nov.	*S. melongena*	Savannakhet	Phalanxai	Namarkme	16.38.59.61	105.33.47.52	155	backyard	landrace	Keukangkob
106	270912	30078686	COL/LAOS/2019/NIVFS-HRC/106	12-Nov.	*S. melongena*	Savannakhet	Phalanxai	Namarkme	16.39.01.58	105.33.50.97	155	farmland	landrace	Keulayporm
107	270913	30078687	COL/LAOS/2019/NIVFS-HRC/107	12-Nov.	*S. melongena*	Savannakhet	Phalanxai	Namarkme	16.39.01.58	105.33.50.97	155	farmland	landrace	Keulayyao
108	270914	30078688	COL/LAOS/2019/NIVFS-HRC/108	12-Nov.	*S. melongena*	Savannakhet	Phalanxai	Namarkme	16.39.01.58	105.33.50.97	155	backyard	landrace	Keukeun
109	270915	30078689	COL/LAOS/2019/NIVFS-HRC/109	12-Nov.	*S. melongena*	Savannakhet	Phalanxai	Namarkme	16.39.01.58	105.33.50.97	155	backyard	landrace	Keulaytamada
110	270916	30078690	COL/LAOS/2019/NIVFS-HRC/110	12-Nov.	*S. melongena*	Savannakhet	Phalanxai	Namarkme	16.39.01.58	105.33.50.97	155	backyard	landrace	Keulaykangkob
111	270917	30078691	COL/LAOS/2019/NIVFS-HRC/111	12-Nov.	*S. melongena*	Savannakhet	Phalanxai	Beungtaley	16.37.09.09	105.33.54.33	157	farmland	landrace	Keukangkob
112	270918	30078692	COL/LAOS/2019/NIVFS-HRC/112	12-Nov.	*S. aethiopicum*	Savannakhet	Phalanxai	Beungtaley	16.37.05.03	105.33.54.82	154	backyard	landrace	Keukao

Table 4. (Continued).

Coll. No.	JP No.	Passport No.	JP Name	Date	Genus and species	Province / State	District	Village	North latitude	East longitude	Elevation (m)	Source	Status	Local name
113	270919	30078693	COL/LAOS/2019/NIVFS-HRC/113	12-Nov.	*S. melongena*	Savannakhet	Phalanxai	Nongveng	16.37.50.49	105.34.48.48	163	backyard	landrace	Keuvan
114	270920	30078694	COL/LAOS/2019/NIVFS-HRC/114	12-Nov.	*S. melongena*	Savannakhet	Phalanxai	Phonetan	16.39.03.51	105.35.39.38	175	farmland	landrace	Keukeunit
115	270921	30078695	COL/LAOS/2019/NIVFS-HRC/115	12-Nov.	*S. melongena*	Savannakhet	Phalanxai	Palannew	16.39.50.81	105.33.54.03	159	farmland	landrace	Keukangkob
116	270922	30078696	COL/LAOS/2019/NIVFS-HRC/116	12-Nov.	*S. melongena*	Savannakhet	Phalanxai	Panomsai	16.40.25.33	105.34.10.50	158	farmland	landrace	Markkeukeun
117	270923	30078697	COL/LAOS/2019/NIVFS-HRC/117	13-Nov.	*S. melongena*	Savannakhet	Phin	Natalang	16.32.29.99	105.02.52.61	184	farmland	landrace	Keukeun
118	270924	30078698	COL/LAOS/2019/NIVFS-HRC/118	13-Nov.	*S. melongena*	Savannakhet	Phin	Natalang	16.32.29.99	106.02.52.61	184	farmland	landrace	Keuit
119	270925	30078699	COL/LAOS/2019/NIVFS-HRC/119	13-Nov.	*S. melongena*	Savannakhet	Phin	Natalang	16.32.57.92	106.03.23.47	188	farmland	landrace	Keukeun
120	270926	30078700	COL/LAOS/2019/NIVFS-HRC/120	13-Nov.	*S. melongena*	Savannakhet	Phin	Nonyangnoy	16.34.14.10	106.04.07.71	191	farmland	landrace	Keuit
121	270927	30078701	COL/LAOS/2019/NIVFS-HRC/121	13-Nov.	*S. melongena*	Savannakhet	Phin	Hauyakai	16.35.25.35	106.05.01.13	199	farmland	landrace	Keukeun
122	270928	30078702	COL/LAOS/2019/NIVFS-HRC/122	13-Nov.	*S. melongena*	Savannakhet	Phin	Hauyakai	16.35.26.69	106.04.59.17	200	farmland	landrace	Keuvan
123	270929	30078703	COL/LAOS/2019/NIVFS-HRC/123	13-Nov.	*S. melongena*	Savannakhet	Phin	Nonyang	16.34.03.78	106.03.22.11	196	backyard	landrace	Keukeun
124	270930	30078704	COL/LAOS/2019/NIVFS-HRC/124	13-Nov.	*S. melongena*	Savannakhet	Phin	Nonyang	16.34.07.94	106.03.21.07	194	farmland	landrace	Keukeuanyao
125	270931	30078705	COL/LAOS/2019/NIVFS-HRC/125	13-Nov.	*S. melongena*	Savannakhet	Phin	Nonyang	16.34.02.12	106.03.21.33	198	farmland	landrace	Keudon
126	270932	30078706	COL/LAOS/2019/NIVFS-HRC/126	13-Nov.	*S. melongena*	Savannakhet	Phin	Saloy	16.34.49.25	106.02.56.18	210	backyard	landrace	Keukeun
127	270933	30078707	COL/LAOS/2019/NIVFS-HRC/127	13-Nov.	*S. melongena*	Savannakhet	Phin	Saloy	16.34.49.25	106.02.56.18	210	farmland	landrace	Keupoy
128	270934	30078708	COL/LAOS/2019/NIVFS-HRC/128	13-Nov.	*S. melongena*	Savannakhet	Xepon	Phosay	16.40.46.30	106.07.42.61	200	backyard	landrace	Keukeun
129	270935	30078709	COL/LAOS/2019/NIVFS-HRC/129	13-Nov.	*S. melongena*	Savannakhet	Xepon	Phosay	16.40.43.35	106.07.48.07	196	backyard	landrace	Keukeun
130	270936	30078710	COL/LAOS/2019/NIVFS-HRC/130	13-Nov.	*S. violaceum*	Savannakhet	Xepon	Phosay	16.40.43.35	106.07.48.01	196	backyard	landrace	Kengkhom
131	270937	30078711	COL/LAOS/2019/NIVFS-HRC/131	13-Nov.	*S. melongena*	Savannakhet	Xepon	Phosay	16.40.45.53	106.07.45.87	200	backyard	landrace	Keukeun
132	270938	30078712	COL/LAOS/2019/NIVFS-HRC/132	13-Nov.	*S. melongena*	Savannakhet	Xepon	Nabokang	16.41.19.06	106.17.24.95	204	farmland	landrace	Keuhummar
133	270939	30078713	COL/LAOS/2019/NIVFS-HRC/133	14-Nov.	*S. melongena*	Savannakhet	Vilabouli	Boungkham	16.58.28.79	105.56.34.10	239	backyard	landrace	Keukeun
134	270940	30078714	COL/LAOS/2019/NIVFS-HRC/134	14-Nov.	*S. melongena*	Savannakhet	Vilabouli	Boungkham	16.58.33.28	105.56.32.05	232	backyard	landrace	Keukeun
135	270941	30078715	COL/LAOS/2019/NIVFS-HRC/135	14-Nov.	*S. melongena*	Savannakhet	Vilabouli	Boungkham	16.58.33.28	105.56.32.05	232	backyard	landrace	Keukeun
136	270942	30078716	COL/LAOS/2019/NIVFS-HRC/136	14-Nov.	*S. melongena*	Savannakhet	Vilabouli	Boungkham	16.58.33.95	105.56.28.57	235	backyard	landrace	Keukangkob
137	270943	30078717	COL/LAOS/2019/NIVFS-HRC/137	14-Nov.	*S. melongena*	Savannakhet	Vilabouli	Hauyseuane	16.59.25.28	105.55.26.51	228	farmland	landrace	Keulay
138	270944	30078718	COL/LAOS/2019/NIVFS-HRC/138	14-Nov.	*S. violaceum*	Savannakhet	Vilabouli	Hauyseuane	16.59.08.02	105.55.18.87	235	backyard	landrace	Kengkhom
139	270945	30078719	COL/LAOS/2019/NIVFS-HRC/139	14-Nov.	*S. melongena*	Savannakhet	Vilabouli	Hauyseuane	16.59.08.02	105.55.18.87	235	backyard	landrace	Keukeunmaung
140	270946	30078720	COL/LAOS/2019/NIVFS-HRC/140	14-Nov.	*S. melongena*	Savannakhet	Vilabouli	Laddengyai	16.58.54.84	105.53.14.00	259	farmland	landrace	Keulaynoy
141	270947	30078721	COL/LAOS/2019/NIVFS-HRC/141	14-Nov.	*S. melongena*	Savannakhet	Vilabouli	Laddengyai	16.58.54.84	105.53.14.00	259	farmland	landrace	Keulay
142	270948	30078722	COL/LAOS/2019/NIVFS-HRC/142	14-Nov.	*S. melongena*	Savannakhet	Vilabouli	Laddengyai	16.58.54.84	105.53.14.00	259	farmland	landrace	Keuporm
143	270949	30078723	COL/LAOS/2019/NIVFS-HRC/143	14-Nov.	*S. melongena*	Savannakhet	Vilabouli	Laddengyai	16.58.56.24	105.53.09.46	264	farmland	landrace	Keupor
144	270950	30078724	COL/LAOS/2019/NIVFS-HRC/144	14-Nov.	*S. melongena*	Savannakhet	Vilabouli	Laddengyai	16.58.56.24	105.53.09.46	264	farmland	landrace	Keupor
145	270951	30078725	COL/LAOS/2019/NIVFS-HRC/145	14-Nov.	*S. torvum*	Savannakhet	Vilabouli	Laddengyai	16.58.56.29	105.53.09.46	264	farmland	landrace	Markkeng
146	270952	30078726	COL/LAOS/2019/NIVFS-HRC/146	14-Nov.	*S. melongena*	Savannakhet	Vilabouli	Laddengyai	16.58.56.29	105.53.09.46	264	farmland	landrace	Markkeuvan
147	270953	30078727	COL/LAOS/2019/NIVFS-HRC/147	14-Nov.	*S. melongena*	Savannakhet	Vilabouli	Mai	16.58.30.12	105.50.35.19	219	farmland	landrace	Keudon
148	270954	30078728	COL/LAOS/2019/NIVFS-HRC/148	14-Nov.	*S. melongena*	Savannakhet	Vilabouli	Mai	16.58.30.12	105.50.35.19	219	farmland	landrace	Keusan
149	270955	30078729	COL/LAOS/2019/NIVFS-HRC/149	14-Nov.	*S. melongena*	Savannakhet	Vilabouli	Mai	16.58.30.12	105.50.35.19	219	farmland	landrace	Markkeu
150	270956	30078730	COL/LAOS/2019/NIVFS-HRC/150	14-Nov.	*S. melongena*	Savannakhet	Vilabouli	Sopa	16.54.01.09	106.01.16.07	209	farmland	landrace	Keupor

Table 4. (Continued).

Coll. No.	JP No.	Passport No.	JP Name	Date	Genus and species	Province / State	District	Village	North latitude	East longitude	Elevation (m)	Source	Status	Local name
151	270957	30078731	COL/LAOS/2019/NIVFS-HRC/151	14-Nov.	*S. melongena*	Savannakhet	Vilabouli	Sopa	16.54.01.09	106.01.16.07	209	farmland	landrace	Keusan
152	270958	30078732	COL/LAOS/2019/NIVFS-HRC/152	15-Nov.	*S. melongena*	Savannakhet	Xepon	Meungchan	16.40.03.73	106.18.30.69	190	backyard	landrace	Markkhouadono
153	270959	30078733	COL/LAOS/2019/NIVFS-HRC/153	15-Nov.	*S. melongena*	Savannakhet	Xepon	Meungchan	16.40.03.73	106.18.30.69	190	backyard	landrace	Markkheuakheun
154	270960	30078734	COL/LAOS/2019/NIVFS-HRC/154	15-Nov.	*S. melongena*	Savannakhet	Xepon	Meungchan	16.40.03.73	106.18.30.69	190	backyard	landrace	Markkheuadone
155	270961	30078735	COL/LAOS/2019/NIVFS-HRC/155	15-Nov.	*S. melongena*	Savannakhet	Xepon	Meungchan	16.40.03.73	106.18.30.69	190	backyard	landrace	Markkheuadone
156	270962	30078736	COL/LAOS/2019/NIVFS-HRC/156	15-Nov.	*S. melongena*	Savannakhet	Xepon	Kenglaung	16.39.00.63	106.22.43.87	228	backyard	landrace	Keusan
157	270963	30078737	COL/LAOS/2019/NIVFS-HRC/157	15-Nov.	*S. aethiopicum*	Savannakhet	Xepon	Meungchan	16.39.50.32	106.17.28.25	199	farmland	landrace	Markkengjai
158	270964	30078738	COL/LAOS/2019/NIVFS-HRC/158	15-Nov.	*S. melongena*	Savannakhet	Xepon	Meungchan	16.39.50.32	106.17.28.25	199	farmland	landrace	Markkeuit
159	270965	30078739	COL/LAOS/2019/NIVFS-HRC/159	15-Nov.	*S. melongena*	Savannakhet	Xepon	Meungchan	16.40.03.92	106.17.24.97	190	farmland	landrace	Keukailand
160	270966	30078740	COL/LAOS/2019/NIVFS-HRC/160	15-Nov.	*S. melongena*	Savannakhet	Xepon	Meungchan	16.40.03.92	106.17.24.97	190	farmland	landrace	Keudon
161	270967	30078741	COL/LAOS/2019/NIVFS-HRC/161	15-Nov.	*S. melongena*	Savannakhet	Xepon	Phonmung	16.42.36.63	106.11.26.05	196	farmland	landrace	Keukeun
162	270968	30078742	COL/LAOS/2019/NIVFS-HRC/162	15-Nov.	*S. melongena*	Savannakhet	Xepon	Phonmung	16.42.30.34	106.11.46.75	196	farmland	landrace	Markkeuhummar
163	270969	30078743	COL/LAOS/2019/NIVFS-HRC/163	15-Nov.	*S. melongena*	Savannakhet	Xepon	Phonmung	16.42.33.54	106.11.51.18	191	farmland	landrace	Keupam